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1. A method of] transferring into the glomerular cells of a kidney of a model mammal] a gene or genes of interest, comprising the step of infusing intra-renal arterially and continuously in a single pass through the superior mesenteric artery ("SMA") or renal artery an effective amount of a recombinant adenovirus vector carrying said gene or genes of interest into said kidney at an effectively slow rate over an effective period of time, under conditions such that at least 30% of said glomerular cells are infected with said vector, wherein said adenovirus vector carries a control element that allows expression of said gene or genes or interest in renal glomerular cells.

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2. The method according to claim 1, wherein said control element comprises a cytomegalovirus enhancer and a chicken beta-actin promoter.

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3. The method according to claim 1, wherein said kidney is maintained at reduced temperatures during said infusion procedure,

4. The method according to claim 1, further comprising clamping the aorta above and below said superior mesenteric renal artery of said kidney, and infusing through said superior mesenteric renal artery.

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5. The method of claim 1, wherein said renal artery is cannulated directly without clamping of said aorta during said infusion.

6. The method of claim 1, wherein said mammal is a rodent, said rate of infusion is about 0.1- 0.5 x 10^{11} particles per minute, and said effective period of adenoviral vector infusion is between about 15 and 120 minutes.

7. The method according to claim 1, further comprising concurrent cannulation of the femoral vein through the vena cava into the renal vein so as to

direct vector not taken up by renal glomerular cells away from the general circulation.

8. The method according to claim 1, wherein said gene is the lacZ gene.

9. The method according to claim 1, wherein said gene encodes a growth factor.

10. The method according to claim 9, wherein said growth factor is selected from the group consisting of fibroblast growth factor, vascular endothelial growth factor, transforming growth factor beta, platelet-derived growth factor, and granulocyte-macrophage colony-stimulating growth factor.

11. The method according to claim 1, wherein said gene encodes a chemikine.

12. The method according to claim 11, wherein said chemikine is selected from the group consisting of monocyte chemoattractant protein-1, macrophage inflammatory protein-1 and -2, and cytokine induced neutrophil chemoattractants.

13. The method according to claim 1, wherein said gene encodes Green Fluorescence Protein.

14. The method according to claim 1, wherein said gene encodes Erythropoetin.

15. The method according to claim 1, wherein said gene encodes CD-2-AssociatedProtein.

16. The method according to claim 1, wherein said gene encodes Nephrin.

17. An animal model for testing the efficacy and efficiency of the transfer of an

adenovirus vector carrying one or more genes into the renal glomerular cells of said animal under conditions such that neither the left kidney nor the liver are exposed to said gene-carrying vector, comprising an animal in which the right kidney, the aorta and the right renal blood vessels are exposed, the aorta is clamped above and below the right renal artery and the superior mesenteric artery ("SMA"), the vector is infused into said right kidney by means of a needle inserted in said SMA or renal artery, said right kidney is cooled to minimize ischemia, renal circulation is reestablished after the infusion period, and gene transfer efficiency is determined by staining tissue sections for expression of the transferred gene, as described in Fig. 1.